CLAIMS

1. An aminophenoxyacetamide derivative represented by the following formula (I):

$$R^{5}-E^{1} \xrightarrow{R^{2}} R^{4} E^{2} \xrightarrow{R^{6} R^{7}} R^{8}$$

$$(1)$$

wherein:

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 R^1 , R^2 , R^3 and R^4 are, independent from each other, hydrogen atom or lower alkyl group;

 R^5 , R^6 , R^7 and R^8 are, independent from each other, hydrogen atom or lower alkyl group;

E¹ is group -NR⁹- (in which, R⁹ is hydrogen atom or lower alkyl group);

 E^2 is oxygen atom or group $-NR^{10}$ - (in which, R^{10} is hydrogen atom or lower alkyl group which may be substituted);

Q is a group of -X-Y-Q', wherein X is a connecting bond, lower alkyl group, lower alkenyl group, or lower alkynyl group; Y is a connecting bond, or a group selected from the groups consisting of C=O, C(=O)NH, NHC(=O), -O-, -S-, CH(OH), -O-CH(OH)- and -O-CH₂-CH(OH)-, in which hydrogen atom of amido group may be substituted with lower alkyl group; and Q' is hydrogen atom or a cyclic group selected from the groups consisting of aryl group, heteroaryl group, saturated or unsaturated cyclic hydrocarbon group, and saturated or unsaturated heterocyclic group, wherein one or more of the hydrogen atoms in the cyclic group of Q' may be substituted;

either in the case that X and Y are both connecting bond then Q' is not hydrogen atom; or in the case that one of X and Y is other than connecting bond then E^2 is the group -O- and all of

the groups of R^1 , R^2 , R^3 and R^4 are not hydrogen atom; or a pharmaceutically acceptable salt thereof.

2. The aminophenoxyacetamide derivative of formula (I) claimed in claim 1, wherein X and Y are both connecting bond; or pharmaceutically acceptable salts thereof.

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- 3. The aminophenoxyacetamide derivative of formula (I) claimed in claim 1, wherein, one of X and Y is other than connecting bond and E² is the group -O- and all of the groups of R¹, R², R³ and R⁴ are other than hydrogen atom, wherein X, Y, R¹, R², R³ and R⁴ are the same as defined above in claim 1; or pharmaceutically acceptable salts thereof.
- 15 4. Medicament containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof represented by the formula (I) claimed in claim 1, as an active ingredient.
- 5. Medicament containing aminophenoxyacetamide derivative or 20 a pharmaceutically acceptable salt thereof according to claim 2, as an active ingredient.
 - 6. Medicament containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof according to claim 3, as an active ingredient.
- 7. Induction agent of the production of CalbindinD-28K, which is Ca²⁺-binding proteins, containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof 30 r presented by the formula (I) claimed in claim 1, as an active ingredient.

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- 8. Induction agent of the production of CalbindinD-28K, which is Ca²⁺-binding proteins, containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof represented by the formula (I) claimed in claim 2, as an active ingredient.
- 9. Induction agent of the production of CalbindinD-28K, which is Ca²⁺-binding proteins, containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof according to claim 3, as an active ingredient.
- 10. A cerebral functional and organic function improving or therapeutic agent containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof represented by the formula (I) claimed in claim 1, as an active ingredient.
- 11. A cerebral functional and organic function improving or therapeutic agent containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof represented by the formula (I) claimed in claim 2, as an active ingredient.
- 12. A cerebral functional and organic function improving or therapeutic agent containing aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof according to claim 3, as an active ingredient.
- 13. Medicament for treating or improving of cerebral functional disorders due to various ischemic disorders such as cerebral infarction, intracerebral hemorrhage and cerebral art riosclerosis, as well as cerebral organic disorders such as senile dementia, cerebral injury, cerebral operation, Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis,

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which contains aminophenoxyacetamide derivative or a pharmaceutically acceptable salt thereof represented by the formula (I) claimed in claim 1 as an active ingredient.

- improving of cerebral for treating or5 14. Medicament functional disorders due to various ischemic disorders such as infarction, intracerebral hemorrhage and cerebral arteriosclerosis, as well as cerebral organic disorders such as senile dementia, cerebral injuty, cerebral operation, Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis, 10 aminophenoxyacetamide derivative contains pharmaceutically acceptable \$alt thereof represented by the formula (I) claimed in claim 2 as an active ingredient.
- for treating or improving of cerebral 15. Medicament 15 functional disorders due to/various ischemic disorders such as intracerebral hemorrhage and cerebral infarction, cerebral arteriosclerosis, as well/as cerebral organic disorders such as senile dementia, cerebral injury, cerebral operation, Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis, 20 aminophendxyacetamide derivative contains pharmaceutically acceptable salt thereof according to claim 3, as an active ingredient.
- 25 16. A method for selecting neuroprotective compound, in which said method is evaluating the activation of receptor of various kinds of physiological active substances and the phosphorylation of FGF receptor, due to the induction of the CalbindinD-28k production.

17. The method for selecting neuroprotective compound according to claim 16, in which said method is evaluating the

autophosphorylation of FGF teceptor.

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18. The method for selecting neuroprotective compound according to claim 16, wherein said method is performed by combining all the Test 1 to 4, by combining Test 1 and 2, by combining Test 1, 2 and 3, by combining Test 1 and 3, or by combining Test 1, 3, and 4, respectively, wherein each of the Test 1 to 4 is consisting of the following method respectively;

Test 1: Evaluation for neuroprotective effect of the compound against glutamate-induced neurodegeneration,

Test 2: Evaluation for antagonism against neuroprotective effect of compounds by treatment of MTA [5-deoxy-5-methyl-thioadenosine], which inhibit autophosphorylation of FGF receptor, and for antagonism by treatment of inhibitor of various physiological active substance receptors such as neurotrophin-3 (NT-3), neurotrophin-4/5 (NT-4/5), brain-derived neurotrophic factor (BDNF), insulin-like growth factor-I/II (IGF-I/II), platelet-derived growth factor (PDGF), estrogen, to determine the neuroprotective effect is due to autophosphorylation of receptors of FGF receptor,

Test 3: Evaluation for CalbindinD-28k inducing effect on the compound, and

- Test 4: Confirmation for the neuropsotective effect of the compound is due to inducing capability of the CalbindinD-28k production, by the treatment of antisense oligonucleotide of CalbindinD-28k.
- 19. Neuroprotective compounds selected by the method according 30 to any one of claims 16 to 18.
 - 20. Medicament containing neuroprotective compounds according

to claim 19.

21. The medicament according to claim 20 for treating or improving of cerebral functional discrders due to various ischemic disorders such as cerebral infarction, intracerebral hemorrhage and cerebral arteriosclerosis, as well as cerebral organic disorders such as senile dementia, cerebral injury, cerebral operation, Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis.

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